TOSCCO: EP0871680

FIG.1

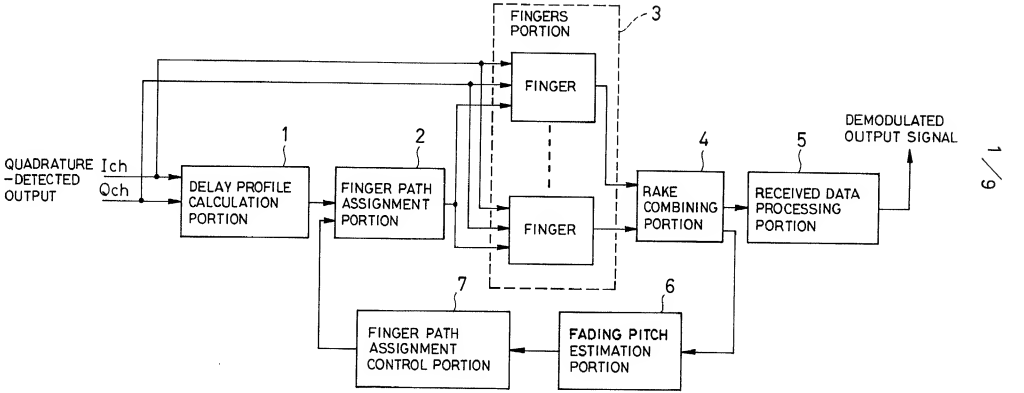


FIG.2

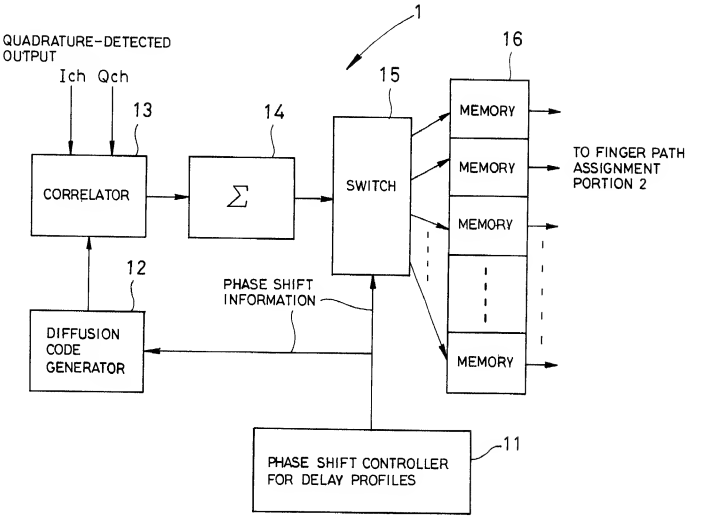
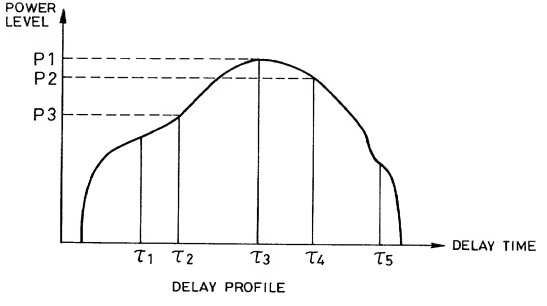

1
QUADRATURE-DETECTED OUTPUT
Ich Qch
13
14
15
16
CORRELATOR
Σ
SWITCH
MEMORY
MEMORY
MEMORY
MEMORY
TO FINGER PATH ASSIGNMENT PORTION 2
12
PHASE SHIFT INFORMATION
DIFFUSION CODE GENERATOR
PHASE SHIFT CONTROLLER FOR DELAY PROFILES
11

FIG.3


POWER LEVEL
P1
P2
P3
τ_1 τ_2 τ_3 τ_4 τ_5
DELAY TIME
DELAY PROFILE

TOSECO: 21687220

FIG. 4

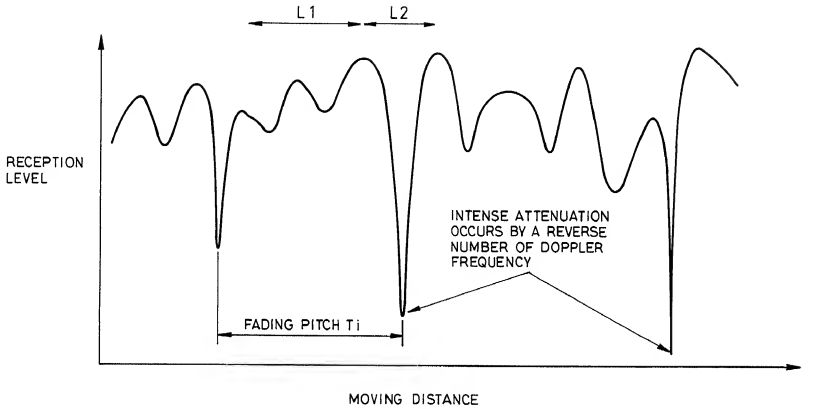


FIG.5

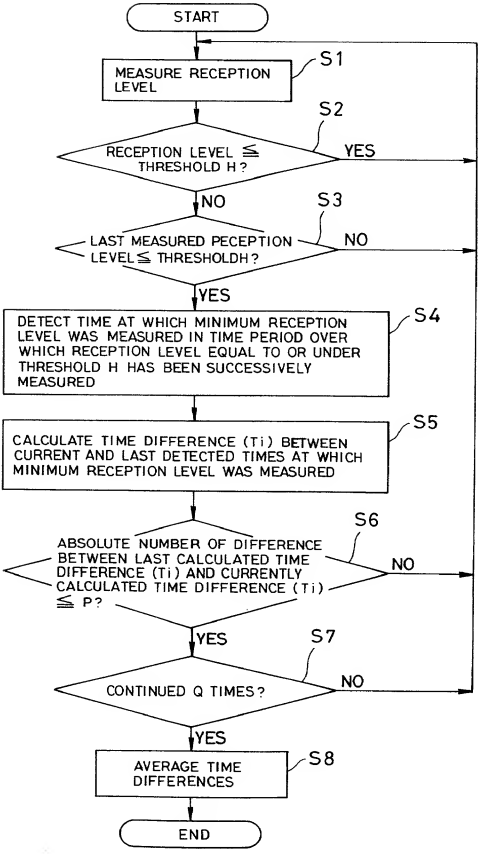

START
MEASURE RECEPTION LEVEL
S1
RECEPTION LEVEL ≦ THRESHOLD H ?
S2
YES
NO
LAST MEASURED PECEPTION LEVEL ≦ THRESHOLDH ?
S3
NO
YES
DETECT TIME AT WHICH MINIMUM RECEPTION LEVEL WAS MEASURED IN TIME PERIOD OVER WHICH RECEPTION LEVEL EQUAL TO OR UNDER THRESHOLD H HAS BEEN SUCCESSIVELY MEASURED
S4
CALCULATE TIME DIFFERENCE (Ti) BETWEEN CURRENT AND LAST DETECTED TIMES AT WHICH MINIMUM RECEPTION LEVEL WAS MEASURED
S5
ABSOLUTE NUMBER OF DIFFERENCE BETWEEN LAST CALCULATED TIME DIFFERENCE (Ti) AND CURRENTLY CALCULATED TIME DIFFERENCE (Ti) ≦ P?
S6
NO
YES
CONTINUED Q TIMES?
S7
NO
YES
AVERAGE TIME DIFFERENCES
S8
END

FIG. 6

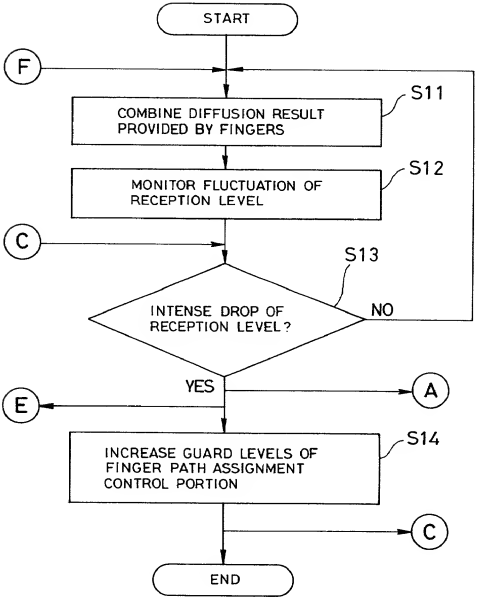

START
F
S11
COMBINE DIFFUSION RESULT PROVIDED BY FINGERS
S12
MONITOR FLUCTUATION OF RECEPTION LEVEL
C
S13
INTENSE DROP OF RECEPTION LEVEL?
NO
YES
A
E
S14
INCREASE GUARD LEVELS OF FINGER PATH ASSIGNMENT CONTROL PORTION
C
END

FIG. 7

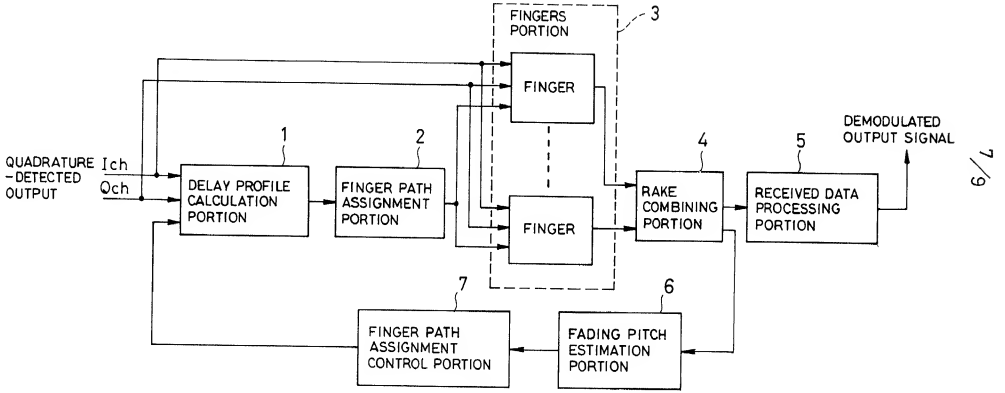

FINGERS PORTION
3
FINGER
FINGER
QUADRATURE -DETECTED OUTPUT
Ich
Qch
1
DELAY PROFILE CALCULATION PORTION
2
FINGER PATH ASSIGNMENT PORTION
4
RAKE COMBINING PORTION
5
RECEIVED DATA PROCESSING PORTION
DEMODULATED OUTPUT SIGNAL
7
FINGER PATH ASSIGNMENT CONTROL PORTION
6
FADING PITCH ESTIMATION PORTION

FIG. 8

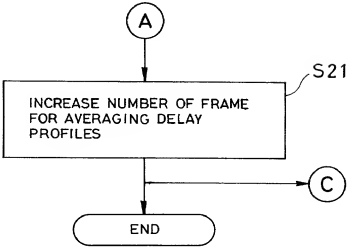

A
S21
INCREASE NUMBER OF FRAME FOR AVERAGING DELAY PROFILES
C
END

FIG. 9

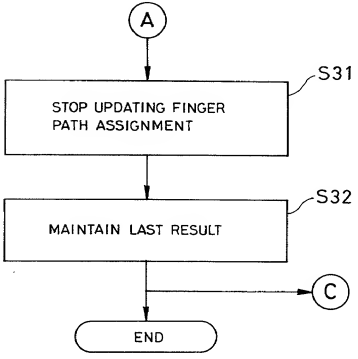
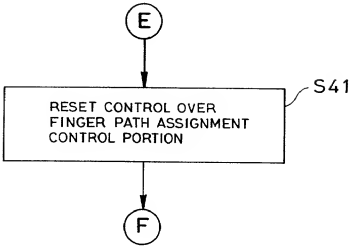

A
S31
STOP UPDATING FINGER PATH ASSIGNMENT
S32
MAINTAIN LAST RESULT
C
END

FIG.10


E
RESET CONTROL OVER
FINGER PATH ASSIGNMENT
CONTROL PORTION
S41
F